

CLAIM AMENDMENTS

Claims 1-4 (canceled).

Claim 5 (withdrawn): The button binder and button connector, as recited in claim 1, wherein said means includes a post tube which is an upper portion of said post and made as a tubular body, a pair of first and second legs being provided at a top portion of said post tube as said locking head, wherein a top end of said first leg has a tooth pawl and a top end of said second leg has a smooth curve edge, wherein said means further includes a mouth formed at a downward edge of said cap hole, wherein one side of said mouth has a smooth curve portion while an opposite side has a sharp tooth latch, wherein when said locking head of said post engages in said cap hole of said button cap, said smooth curve portion and said smooth curved leg fit with each other to form a smooth curve site and said tooth pawl and said sharp tooth latch mesh with each other to form a tooth pawl site, wherein said button is able to be opened from said smooth curve site, wherein a split notch formed between said first and second legs enables said first and second legs easy to engage into said button cap.

Claim 6 (withdrawn): The button binder and button connector, as recited in claim 2, wherein said means includes a post tube which is an upper portion of said post and made as a tubular body, a pair of first and second legs being provided at a top portion of said post tube as said locking head, wherein a top end of said first leg has a tooth pawl and a top end of said second leg has a smooth curve edge, wherein said means further includes a mouth formed at a downward edge of said cap hole, wherein one side of said mouth has a smooth curve portion while an opposite side has a sharp tooth latch, wherein when said locking head of said post engages in said cap hole of said button cap, said smooth curve portion and said smooth curved leg fit with each other to form a smooth curve site and said tooth pawl and said sharp tooth latch mesh with each other to form a tooth pawl site, wherein said button is able to be opened from said smooth curve site, wherein a split notch formed between said first and second legs enables said first and second legs easy to engage into said button cap.

Claim 7 (withdrawn): The button binder and button connector, as recited in claim 5, wherein said means further comprises a locker post downwardly and coaxially extended from a cap base of said button cap into said cap hole, wherein when said button is closed, said locker post is extended and inserted into said split notch to hold

said first leg in a locking position by eliminating a space between said locker post and said first leg to prevent said button being opened from said tooth pawl site, while leaving sufficient space between said locker post and said second leg to enable said button being opened from said smooth curve site.

Claim 8 (withdrawn): The button binder and button connector, as recited in claim 6, wherein said means further comprises a locker post downwardly and coaxially extended from a cap base of said button cap into said cap hole, wherein when said button is closed, said locker post is extended and inserted into said split notch to hold said first leg in a locking position by eliminating a space between said locker post and said first leg to prevent said button being opened from said tooth pawl site, while leaving sufficient space between said locker post and said second leg to enable said button being opened from said smooth curve site.

Claim 9 (withdrawn): The button binder and button connector, as recited in claim 5, wherein said cap hole is a through hole and said second leg is longer than said first leg and extended out of said cap hole, wherein said tooth pawl site is able to be unlocked by pushing an end of said second leg toward said first leg to disengage said tooth pawl with said sharp tooth latch so as to open said button.

Claim 10 (withdrawn): The button binder and button connector, as recited in claim 6, wherein said cap hole is a through hole and said second leg is longer than said first leg and extended out of said cap hole, wherein said tooth pawl site is able to be unlocked by pushing an end of said second leg toward said first leg to disengage said tooth pawl with said sharp tooth latch so as to open said button.

Claim 11 (withdrawn): The button binder and button connector, as recited in claim 9, wherein a top end of said second leg forms a handle which is inclined extended out of said cap hole of said button cap for opening said button by pushing down said handle.

Claim 12 (withdrawn): The button binder and connector, as recited in claim 10, wherein a top end of said second leg forms a handle which is inclinedly extended out of said cap hole of said button cap for opening said button by pushing down said handle.

Claim 13 (withdrawn): The button binder and connector, as recited in claim 1, wherein said button cap comprises a cap base which has a projection extended downwardly at a center of said cap base, wherein said projection has an enlarged

portion at one end thereof and said button cap centrally has a belly projection facing downwards with an axial hole which has a middle segment greater in diameter than an upper segment and a lower segment thereof, wherein said means comprises a U-shaped spring which is holed in said middle segment and said projection of said cap base is pressed into said axial hole of said button cap, wherein said means further comprises an enlarged head provided at an upper end of said post of said button post as said locking head, wherein said enlarged head has a diameter larger than said button post and said button post is capable of piercing in a space where said spring is provided, wherein a latch notch is formed adjacent to a first side of said enlarged head and a smooth curve edge formed at an opposite second side of said latch notch, wherein when said button is closed that is said button cap is connected with said button post while said enlarged head is engaged with said button cap, one leg of said spring is arranged to mesh in said latch notch to form a locking site while another leg of said spring and said smooth curve edge of said enlarged head to form a smooth curve site, wherein said leg of said spring is retained securely in said latch notch so that said button is unable be opened from said locking site of said latch notch and said spring while said button is able to be opened from said smooth curve site.

Claim 14 (withdrawn): The button connector, as recited in claim 2, wherein said button cap comprises a cap base which has a projection extended downwardly at a center of said cap base, wherein said projection has an enlarged portion at one end thereof and said button cap centrally has a belly projection facing downwards with an axial hole which has a middle segment greater in diameter than an upper segment and a lower segment thereof, wherein said means comprises a U-shaped spring which is holed in said middle segment and said projection of said cap base is pressed into said axial hole of said button cap tightly through said holes of said pull piece and said connection piece to affix said button cap on said connection piece, wherein said means further comprises an enlarged head provided at an upper end of said post of said button post as said locking head, wherein said enlarged head has a diameter larger than said button post and said button post is capable of piercing in a space where said spring is provided, wherein a latch notch is formed adjacent to a first side of said enlarged head and a smooth curve edge formed at an opposite second side of said latch notch, wherein when said button is closed that is said button cap is connected with said button post while said enlarged head is engaged with said button cap, one leg of said spring is arranged to mesh in said latch notch to form a locking site while another leg of said spring and said smooth curve edge of said enlarged head to form a smooth curve site,

wherein said leg of said spring is retained securely in said latch notch so that said button is unable be opened from said locking site of said latch notch and said spring while said button is able to be opened from said smooth curve site.

Claim 15 (withdrawn): The button binder and button connector, as recited in claim 1, wherein said button cap comprises a cap base which has a projection extended downwardly at a center of said cap base, wherein said projection has an enlarged portion at one end thereof and said button cap centrally has a belly projection facing downwards with an axial hole which has a middle segment greater in diameter than an upper segment and a lower segment thereof, wherein said means comprises a U-shaped spring which is holed in said middle segment and said projection of said cap base is pressed into said axial hole of said button cap, wherein said means further includes two latch teeth formed at a half periphery edge of said locking head of said post of said button head, wherein two notches are formed under said two latch teeth respectively while other opposite half circle part of said locking head has no latch teeth and is smooth to said notches while a smooth curve edge from said latch tooth transferring to said half circle part, wherein two legs of said spring are engaged in said two notches respectively when said button is closed, wherein said button is able to be opened from a side that has no latch teeth by said legs of said spring moving along said smooth curve edge, wherein said button is unable to opened at a side having said latch teeth.

Claim 16 (withdrawn): The button binder and connector, as recited in claim 2, wherein said button cap comprises a cap base which has a projection extended downwardly at a center of said cap base, wherein said projection has an enlarged portion at one end thereof and said button cap centrally has a belly projection facing downwards with an axial hole which has a middle segment greater in diameter than an upper segment and a lower segment thereof, wherein said means comprises a U-shaped spring which is holed in said middle segment and said projection of said cap base is pressed into said axial hole of said button cap, wherein said means further includes two latch teeth formed at a half periphery edge of said locking head of said post of said button head, wherein two notches are formed under said two latch teeth respectively while other opposite half circle part of said locking head has no latch teeth and is smooth to said notches while a smooth curve edge from said latch tooth transferring to said half circle part, wherein two legs of said spring are engaged in said two notches respectively when said button is closed, wherein said button is able to be

opened from a side that has no latch teeth by said legs of said spring moving along said smooth curve edge, wherein said button is unable to be opened at a side having said latch teeth.

Claim 17 (withdrawn): The button binder and connector, as recited in claim 1, wherein said button cap comprises a cap base which has a projection extended downwardly at a center of said cap base, wherein said projection has an enlarged portion at one end thereof and said button cap centrally has a belly projection facing downwards with an axial hole which has a middle segment greater in diameter than an upper segment and a lower segment thereof, wherein said means comprises a U-shaped spring which is holed in said middle segment and said projection of said cap base is pressed into said axial hole of said button cap, wherein said means further comprises an enlarged head provided at an upper end of said post of said button post as said locking head, wherein said enlarged head has a diameter larger than said button post and said button post is capable of piercing in a space where said spring is provided, wherein one side of said post has a flat surface and a first leg of said spring is a flat leg having a flat area to be engaged with said flat surface of said post together to form a locking site so as to prevent said button from being opened at said locking site while a second leg of said spring and a smooth curve edge of said enlarged head fit with each other to form a smooth curve site, wherein said leg of said spring is retained securely in said latch notch so that said button is unable to be opened from said locking site while said button is able to be opened from said smooth curve site.

Claim 18 (withdrawn): The button binder and connector, as recited in claim 2, wherein said button cap comprises a cap base which has a projection extended downwardly at a center of said cap base, wherein said projection has an enlarged portion at one end thereof and said button cap centrally has a belly projection facing downwards with an axial hole which has a middle segment greater in diameter than an upper segment and a lower segment thereof, wherein said means comprises a U-shaped spring which is holed in said middle segment and said projection of said cap base is pressed into said axial hole of said button cap, wherein said means further comprises an enlarged head provided at an upper end of said post of said button post as said locking head, wherein said enlarged head has a diameter larger than said button post and said button post is capable of piercing in a space where said spring is provided, wherein one side of said post has a flat surface and a first leg of said spring is a flat leg having a flat area to be engaged with said flat surface of said post together to

form a locking site so as to prevent said button from being opened at said locking site while a second leg of said spring and a smooth curve edge of said enlarged head fit with each other to form a smooth curve site, wherein said leg of said spring is retained securely in said latch notch so that said button is unable be opened from said locking site while said button is able to be opened from said smooth curve site.

Claim 19 (withdrawn): The button binder and button connection, as recited in claim 2, wherein said cap hole of said bottom cap is a dumb-bell hole which is formed by connecting a first hole and a second hole, wherein said first hole has a diameter at least equal to that of said locking head to enable said locking head to pass through and said second hole has a diameter smaller than said first hole and at least equal to that of said post, wherein to open said button, position said locking head at said first hole and, to lock said button, position said locking at said second hole, said button cap being connected to button post by connection piece for said button binder.

Claim 20 (canceled).

Claim 21 (new): ~~The button binder, as recited in claim 20,~~ A button binder for binding papers each having at least a punched hole, comprising:

a body comprising a front sheet and a rear sheet connected edge-to-edge to define at least a folding line therebetween; and

a plurality of buttons, each of which comprises a button cap provided on said front sheet of said body and a button post which is adapted for passing through said punched holes of said papers and is provided on said rear sheet at a position aligned with said button cap, wherein said button post comprises a post and an enlarged locking head at a top end of said post, wherein said button cap having a cap hole to receive said locking head of said post therein, wherein said post of said button post, having a quadrilateral cross section, has first to fourth sides, wherein said third side and said opposed fourth side of said post are flat surfaces, wherein said locking head has a smooth curve portion formed at said first side of said post and a sharp shoulder formed at said second side of said post, wherein when said locking head of said button post is inserted into said cap hole of said button cap, said button post is securely engaged with said button cap that said flat surfaces of said post are blocked in said button cap for preventing said locking head from sliding out of said cap hole of said button cap so as to securely hold said papers between said front and rear sheets of said body.

wherein said button cap further has a mouth having a corresponding cross section with respect to said button post and defining at an opening of said cap hole, wherein a third side edge and an opposed fourth side edge of said mouth are flat surfaces corresponding to said third and fourth sides of said post respectively, wherein a first side edge of said mouth is a smooth curve edge aligning with said first side of said post, wherein a second side edge of said mouth is a sharp shoulder edge aligning with said second side of said post, wherein when said locking head of said button post is inserted into said cap hole of said button cap, said smooth curve portion of said locking head fits to said smooth curve edge of said mouth to form a smooth curve site while said sharp shoulder of said locking head latches with said sharp shoulder edge to form a tooth pawl side such that said locking head is detached from said button cap only when said smooth curve portion of said locking head disengages with said smooth curve edge of said mouth at one direction of said first side of said post so as to prevent said locking head unintentionally detached from said button cap at three directions of said second to fourth sides of said button post.

Claim 22 (previously presented): The button binder, as recited in claim 21, further comprising a plurality of pull pieces spacedly extended from said front sheet to respectively hold said button caps in position, wherein each of said pull pieces forms a handle to pull said button cap to engage with said button post and to push said button cap to disengage with said button post.

Claim 23 (previously presented): The button binder, as recited in claim 22, further comprising a plurality of cap bases securely attaching to said button caps at said pull pieces respectively, wherein each of said pull pieces is sandwiched between said corresponding cap base and said button cap.

Claim 24 (previously presented): The button binder, as recited in claim 23, wherein said pull pieces are extended along said folding line of said body at said front sheet.